# Work Order ID 98804 Monday, March 25, 2013 10:08:35 AM

\*98804\*

Item ID: **Revision ID:**  D3955-3

Accept

\*N900040100\*

Setup Start

Stop

Item Name: **Start Date:** 

Cover Plate 3/25/2013

Start Qty: 8.00 Req'd Qty: 8.00

**Cust Item ID:** 

**Customer:** 

Reference:

Process Plan: Approvals:

Required Date: 3/25/2013

mp

Run

Start

QC:

Date:

SPC (Y/N):

Date: Date:

Stop

Sequence ID/ Work Center ID Draw Nbr

Operation Description **Revision Nbr** 

Set Up/ **Run Hours**  Tool ID

Tool # Plan Code

Reject Accept Qty Qty

Reject Number

Insp. Stamp

D3955

100

Α

0.00

\*100\*

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3955 Dwg Rev: 🔏

Prog Rev:\_\_\_

2-Deburr if necessary

011

QC2- Inspect parts off machine FAI/FAIB

0.00

\*110\* QC

Memo

0.00

8

Quality Control

			DQA:	Date:
NCR: Yes / No	WORK ORDER NON-CONF	QA Closed:	Date:	
Work Order:	DISPOSITION	AGAINST	T DEPARTMENT/PRO	OCESS
Part No.	Rework Scrap	Skid-tube Crosstube  Machining Small Fab		Vater Jet Engineering Ouality

Initial

Chief Eng

Use-as-is

Work Order Update

Description of work order update

or Non-conformance

Thermoforming

Large Fab

Rec/Store/Packaging

Sign &

Date

Supplier

Verification

**Finishing** 

Composite

Action

Description

Other

QC Inspector

Operator				
Material				
Setup				
Other				
Process				
Supplier				
Training				00
Unapproved				
			FAULT CATEGORY	
Landi	ng Gear	General	· _	
	Bending	Bend	Grain	Ovalized Pressure/Forced
}	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect Weld
	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing Wrong Stock Pulled
	Cuffs	Contamination	Maintenance	Part Moved
	Heat Treat	Countersink	Mislabeled	Positioned Wrong
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge Other
	Ripples in Bend	Drill Holes	Offset	
	Torque Waves in Extrusion	Drawing	Out of Calibration	
	Turning Sequence	Finish	Out of Sequence	
	Wave/Twist in Tube	Folio	Outside Dimensions	

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NCR No.

Date

Step

Qty

Root

Cause
Doc/Data
Equip/Tooling

### Work Order ID 98804 \*98804\*

QC3- Inspect Part Finish

Memo

Monday, March 25, 2013 10:08:35 AM

140

OC

\*140\*

Quality Control

Item ID: D3955-3 Accept \*N900040100\* Setup Start Revision ID: Stop Item Name: Cover Plate \*8\* Start Date: 3/25/2013 Start Qty: 8.00 **Cust Item ID:** Required Date: 3/25/2013 Req'd Qty: 8.00 \*Q\* **Customer:** Reference: Run Approvals: **Process Plan:** Date: Tooling: Date: Stop OC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Plan Accept Reject Reject Insp. Work Center ID Run Hours Description Code Qty Qty Number Stamp 120 QC8- Inspect parts - second check 0.00 \*120\* 0.00 15 5 25 OC Memo Quality Control Wing Walk as per dwg QSI005 4.4 Batch 343760.00 :130 \*120\* 8x & M13/03/21 HandFinish 0.00 Memo Hand Finishing

0.00

0.00

N/CD.	Voc	1	No
NCR:	Yes	/	No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: Y	es / No				WORK ORDER NON-	CONF	ORIVIA	ANCE / UP	DATE		QA Closed:	Date	<b>:</b>
Work Orde	ŕ:	·			DISPOSITION				AGAIN	IST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap Use-as-is						Engineering Quality Other		
NCR N	o				Work Order Update	<b>]</b>		arge Fab	Compos			Supplier	
Root					ption of work order update	Initi	i		ion		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief	Eng	Desci	ription		Date	Verification	QC Inspector
Doc/Data	_								ļ				
quip/Tooling	_								I 1				
Operator	_								i				
Material	_	1			•								
Setup	-	Ì		·									
Other	-												
Process	-			,					į				
Supplier Training									i				
Unapproved									İ				
biiappioved T		<u>.                                    </u>	<u>1</u>	L	F	AULT C	ATEGO	ORY					
Landin	g Gear				General							;	
	Bending				Bend	Gra	ain				Ovalized	Γ	Pressure/Forced
-	Centre No	ot Conce	ntric to	o/s	BOM/Route	Har	rdware		!		Over/Under	tolerance	Temperature/Cure
[	Cracks				Broken/Damaged	Ins	pection	Incomplete	 		Part Incorred	ct 🗍	Weld
ľ	Crushed/	Crimped			Burrs	Inst	truction	ns Incomplete/I	Jnclear		Part Lost/Mi	ssing	Wrong Stock Pulled
Ì	Cuffs	· • • • • • • • • • • • • • • • • • • •				Ма	aintena	ance	i		Part Moved		
ļ	Heat Treat Countersink				Mis	slabele	d			Positioned W	Vrong		
Ī	Inspection Strip in Tube Cut Too Short				Mis	sread		İ		Power Loss/:	Surge	Other	
Ī	Ripples in Bend Drill Holes				Off	fset			·				
Ţ	Torque W	/aves in 6	xtrusio	n 🗀	Drawing	Out of Calibration							
	Turning S	equence			Finish	Ou	t of Sec	quence	1				
Wave/Twist in Tube Folio					Ou	tside D	imensions						

\*98804\*

Page 3

Monday, Marc	ch 25, 2013-10	):08:35 AM		76 )(	11 /				S	
Item ID: Revision ID:	D3955-3			Accept	*N90004010	<b>N</b> 0*	Setup		NS1*	
Item Name:	Cover Plate							Stop *	NS2*	
Start Date:	3/25/2013	Start Qty: 8.00	*8*		Cust Item ID:			•		
Required Date	e: 3/25/2013	Req'd Qty: 8.00	*8*		Customer:					
Reference:			• •							
Approvals:	Process Pla	an:	Date:	Tooling:	Date:		Run	Start *	NR1*	
	QC:		Date:	SPC (Y/N):	Date:			Stop *	NR2*	
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID Tool # Pla Co		pt Rej Qty			
150		Identify as per dwg & St	ock Location: STOF				C·3			
*150* Packaging		Memo		0.00	•	8	X		D,	. /
Packaging				•				/	3-3-0	4
160		QC21- Final Inspection -	Work Order Release	0.00				,	1	
*160* QC Quality Control		Memo		0.00				13/3/	27 0	
Quality Control								. /1 /	( / )	

13/2/21/AT 13-3-24

NCR:	Yes	/ No

											DQA:	Date	2:	
NCR:	⁄es	/ No				WORK ORDER NO	ON-CO	NFORN	MANCE / UPDATE	ļ				
					-						QA Closed:	Date	2:	
Vork Ord	٠r٠					DISPOSITION		AGAINST DEPARTMENT/PROCESS						
VOIR OIU	-'' .			<del></del>		Rewo	rk 🗌	Skid-tube Crosstube Water Jet Engineering						
Part I	No.					Scr			<u> </u>	all Fab	Pro	d. Eng. Coor.	Quality	
						Use-as	· <del></del> 1		· —	ishing	Rec/Sto	re/Packaging	Other	
NCR I	۷o.				· 	Work Order Upda	Work Order Update Large Fab Compo					Supplier	]	
			· · · · · ·	,	1					<del> </del>				
Root											Sign &	., .,		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Description	1	Date	Verification	QC Inspector	
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rocess						•				!				
upplier				•										
raining									•	!				
napproved														
							FAUL	T CATE	GORY	ļ ·				
Landi	ng (	Gear			_	General	· _			_	<b>-</b>	_	_	
•		Bending			ļ	Bend		Grain			Ovalized	_	Pressure/Forced	
	L	Centre No	t Concer	ntric to	o/s	BOM/Route		Hardwai		<b> </b>	Over/Under	<del> </del>	Temperature/Cure	
		Cracks			L	Broken/Damaged		_	on Incomplete		Part Incorred	<u> </u>	Weld	
	_	Crushed/0	Crimped		<u> </u>	Burrs			ons Incomplete/Unclear	-	Part Lost/Mi	ssing	Wrong Stock Pulled	
	_	Cuffs			-	Contamination		Mainte	-	<u> </u>	Part Moved			
	-	Heat Trea		<b>~</b> ,	 	Countersink	-	Mislabe	I	<b> </b> -	Positioned V		7046	
	<u> </u>	Inspection		Tube	. }	Cut Too Short		Misread			Power Loss/	ourge	Other	
	$\vdash$	Ripples in		` <del></del>	_	Drill Holes		Offset	alibration					
	$\vdash$	Turning S			" ├	Drawing Finish	<u> </u>		equence					
	<b> </b> -	Turning Se	-		-	<del></del>	-	!						
	Wave/Twist in Tube Folio Outside Dimensions								DITTELISIONS					

# Picklist Print

Monday, March 25, 2013 10:08:35 AM

Work Order ID:

98804

Parent Item:

D3955-3

Parent Item Name:

Cover Plate

Comments:

IPP RevA: New issue DD verified by:EC

**Start Date:** 3/25/2013

Required Date: 3/25/2013

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA 304/316 Sheet .063		Purchased	No			100	sf	483.6360	0.3553	2.992	M	13.03	.25
				Location		Loc Oty	Lo	c Code					

<u>Location</u>	Loc Qty	Loc Code	
MAT020	483.636		
122245	3.856		
123136	140.8		
124428	55.93		
124572	283.05		

Page 1

NCR:	Yes	/	Nο

DQA: \_\_\_\_\_ Date: \_\_\_

NCR: Y	es / No				WORK ORDER NON-	CONFC	RMAN	JE / UP	DATE		QA Closed:	Date	:
Work Orde	ŕ:				DISPOSITION				AGA	AINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap Use-as-is	] 	Skid-t Machii ermoforn	ning	Sma	stube Il Fab ishing	→	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	o				Work Order Update	┪╽¨¨				posite Supplier			
Root				Descri	ption of work order update	Initia	ıl	Ac	tion		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng	Desc	ription	i 	Date	Verification	QC Inspector
Doc/Data	_									<b> </b>  -			
Equip/Tooling	4								į	!			
Operator	_								į	!			
Material													
Setup	_								, I				
Other	_								i				
Process									į				
Supplier						1			i				
Training Unapproved	-								į				
biiappioved	<u> </u>	<u> </u>	11			AULT CA	TEGORY				<b>J</b>		
Landin	g Gear				General				i	<u>.</u>			
	Bending				Bend	Gra	in		1	Г	Ovalized	Г	Pressure/Forced
	Centre No	ot Conce	ntric to C	o/s	BOM/Route	$\vdash$	dware				Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Insp	ection Inco	mplete	i		Part Incorred		Weld
	Crushed/	Crimped			Burrs	<del></del>	ructions Inc		Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
. [	Cuffs Contamination				Contamination	Ma	intenance				Part Moved	<u> </u>	_
	Heat Trea		Countersink	Mis	abeled				Positioned V	/rong			
ľ	Inspection	n Strip in	Tube		Cut Too Short	Mis	read		1		Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes	Offs	et						
	Torque Waves in Extrusion Drawing					Out of Calibration							
	Turning Sequence Finish				Out of Sequence								
F	Wave/Tw	ist in Tub	oe -		Folio	Out	side Dimen	sions					

€ SYM -- 0.060 REF - 10.75 D - 8.199 APPLY ANTI-SKID ON ONE SIDE ONLY С 29° # 98804 - 1.313 Ø0.201 2 PL 0.0 R1.00 2.38 **D3955-3 COVER PLATE** NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 0.060 (16 GA) THICK (REF. DART SPEC. M304S16GA)
2) FINISH: BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3955-3" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.64 lbs DESIGN DS, DART AEROSPACE LTD DRAWN RF HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. A D3955 MFG. APPR SHEET 2 OF 5 APPROVED TITLE SCALE SKIDTUBE TUNING KIT DE APPR. NTS COPYRIGHT ® 2009 BY DART AEROSPACE LTD

THIS DECEMBER OF PRIVATE AND CONTROLLY MADES CUPPLES OF THE EUROPESS COCKNOWN AND IS CUPPLES OF THE EUROPESS OF COMMON THAT IT IS
NOT TO BE USED FOR MAY PRIVADES OF COME OF COMMINICATES TO ANY OTHER PRIVADE WITHOUT PRIVADES OF COME OF AUGUSTACE ARROPATICE, ITS DATE 09.07.21 5

										İ	DQA:	Date:			
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFOR	MANCE / UPDATE		QA Closed:	Date			
* #						DISPOSITION			A.G.						
Vork Ord	er:					DISPOSITION			AG/	AINSI DI	INST DEPARTMENT/PROCESS				
Part I	•					Rework Scrap Use-as-is Work Order Update		Skid-tube Crosst  Machining Small  Thermoforming Finis  Large Fab Compo				Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other		
Root				l -	Descr	iption of work order update	T	I Initial	Action	1	Sign &	·-·			
Cause		Date	Step					nief Eng	Description		Date	Verification	QC Inspector		
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		4					FAUL	T CATE	GORY	: <u>:                                   </u>					
Land	ng (	1			_	General □ .		1		_	7		7		
	<u> </u>	Bending			.	Bend	<u> </u>	Grain		·	Ovalized	.	Pressure/Forced		
	L	Centre No	ot Concer	ntric to	O/S	BOM/Route	-	Hardwa		<u> </u>	Over/Under	<del></del>	Temperature/Cure		
	<u> </u>	Cracks			<u> </u>	Broken/Damaged	<u> </u>	4	ion Incomplete		Part Incorred		Weld		
	<u> </u>	Crushed/0	Crimped		ļ	Burrs	<u> </u>	-	ions Incomplete/Unclear	<u> </u>	Part Lost/Mi	ssing	Wrong Stock Pulled		
	L	Cuffs Contamination						Mainte		<u> </u>	Part Moved	I			
	Heat Treat					Countersink	$\vdash$	Mislabe		<u> </u>	Positioned V		٦		
	Inspection Strip in Tube					Cut Too Short	<u> </u>	Misread	t i		Power Loss/	Surge	Other		
		Ripples in			_	Drill Holes	$\vdash$	Offset				· · · · · · · · · · · · · · · · · · ·			
	<u></u>	Torque W			n	Drawing	Out of Calibration								
		Turning Se			L	Finish	Out of Sequence								
	Wave/Twist in Tube Folio Outside Dimensions							Dimensions							

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DART AEROSPACE LTD	Work Order: 98804	
Description: Cover Plate	Part Number: D3955-3	
Inspection Dwg: D3955 Rev: A	Page 1 of 1	<u> </u>

## FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.201	+0.005/-0.001	0.205	V		1/	MM-01
2.38	+/-0.030	2.383	0		V	
1.313	+/-0.010	1.309	V		٧	
8.199	+/-0.010	8.189	V		V	
10.75	+/-0.030	10.75			V	
0.063	+/-0.010	0.059	V		V	The second of th
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Measured by:	Mal	Audited by:	SM	Prototype Approval:	N/A
Date:	13.03.25	Date:	133	Date:	N/A

Rev	Date	Change	Revised/by	Approved
Α	09.07.29	New Issue	KJ 90	11/2
			/ <del>/</del> /	

DQA: Date:								·					
NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE													
	;							4.00			QA Closed:	Date:	:
Work Order:				DISPOSITION		AGAINST D			DEPARTMENT/PROCESS				
Part No					Rework Scrap Use-as-is Work Order Update		Machining Small Fall Thermoforming Finishing		Crosstube Small Fab Finishing Composite	Prod. Eng. Coor. Rec/Store/Packaging		Engineering Quality Other	
					<u> </u>				_	-	l c: o	-	1
Root	Date	e Step	Ott		•	f work order update -conformance		nitial ief Eng		action scription	Sign & Date	Verification	QC Inspector
Cause Doc/Data	Date	s Step	Qty		OF NOTE	-conformance	Cii	iei ciig	Des	scription	Date	vernication	QC Inspector
quip/Tooling	-	1											
Operator	1	1											·
Material	7												
Setup						•					•		
Other													
Process		İ				•							
Supplier		7											
Training							<b> </b>						
Jnapproved					,								
						F	AUL	T CATE	GORY				
Landin	g Gear			_	_	General		_		_	_	_	_
]	Bendii	ng			Bend		Grain			L	Ovalized		Pressure/Forced
1	Centre Not Concentric to O/S BOM/Rou						Hardware			Over/Under tolerance		Temperature/Cure	
ļ	Crack	Broken/Damaged					Inspection Incomplete			<b>⊣</b>		Weld	
		ed/Crimped	l		Burrs			Instructions Incomplete/Unclear		- · · ·		Wrong Stock Pulled	
	Cuffs			_	-	mination		Maintenance		Part Moved			
1	Heat 1			<u> </u>	┥ ∣	Countersink			led	_	Positioned Wrong		7
ļ	Inspection Strip in Tube Cut Too Short					Misread			Power Loss/Surge Other				
·	Ripples in Bend Drill Holes							Offset			·		
		e Waves in		n L	Drawi	_	<u> </u>	ł	Calibration				
		g Sequence		L	Finish			1	equence				·
Wave/Twist in Tube Folio						<u> </u>	Outside	Dimensions					